

IN THE CLAIMS:

1. (Previously Presented) A method of prefetching one or more Internet resources referenced in one or more Web pages, said method comprising the steps of:

5 obtaining one or more estimated round trip times for said Internet resources, wherein said one or more estimated round trip times are based on an interval of time between a sending of an HTTP request and a receipt of a response to said HTTP request; and

prefetching said Internet resources based on a descending order of said one or more estimated round trip times.

10 2. (Original) The method according to claim 1, wherein two or more of said Internet resources are prefetched substantially in parallel.

15 3. (Previously Presented) The method according to claim 1, wherein said step of prefetching said Internet resources based on said one or more estimated round trip times is performed only for Internet resources associated with origin servers that have been previously accessed and said method further comprising the step of prefetching all Internet resources associated with servers that have not been previously accessed.

20 4. (Previously Presented) The method according to claim 1, wherein said one or more estimated round trip times for each Internet resource is based on average access time statistics for the corresponding origin server and the actual size of said Internet resource when said actual size is available.

25 5. (Previously Presented) The method according to claim 4, wherein said one or more estimated round trip times for each Internet resource is based on average access time statistics for the corresponding origin server and the average size of Internet resources provided by said origin server if said origin server does not indicate said actual size.

6. (Previously Presented) The method according to claim 4, wherein said one or more estimated round trip times for each Internet resource is based on average access time statistics for the corresponding origin server and the average size of Internet resources provided by said origin server if the setup and wait time for accessing said origin server is not significantly less than the average round trip time for Internet resources obtained from said origin server.

7. (Previously Presented) The method according to claim 1, wherein said one or more estimated round trip times are based on at least one actual prior round trip time for said Internet resource.

8. (Original) The method according to claim 1, wherein said step of prefetching said Internet resources does not begin until said one or more Web pages have been fetched.

9. (Original) The method according to claim 1, wherein said step of prefetching said Internet resources continues until said Internet resources have been prefetched or until a user selects a new Web page.

10. (Original) The method according to claim 1, further comprising the steps of storing said Internet resources in a cache and determining if any of said Internet resources are already stored in said cache before prefetching begins.

11. (Original) The method according to claim 1, further comprising the step of applying a filter to said Internet resources to reduce the overhead on network, server or local resources due to prefetching.

12. (Original) The method according to claim 11, wherein said filter discards all Internet resources that do not use the HTTP protocol for transmission.

13. (Original) The method according to claim 11, wherein said filter discards all Internet resources that corresponding to dynamically generated Web resources.

14. (Original) The method according to claim 11, wherein said filter discards all Internet resources that correspond to resources whose size is more than a certain maximum size threshold.

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15. (Original) The method according to claim 11, wherein said filter discards all Internet resources that correspond to resources whose estimated round trip time is longer than a certain maximum time.

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16. (Original) The method according to claim 11, wherein said filter discards all Internet resources that correspond to resources whose estimated round trip time is shorter than a certain minimum time threshold.

17. (Previously Presented) A method of prefetching one or more Internet resources referenced in one or more Web pages, said method comprising the steps of:

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determining one or more estimated round trip times for said Internet resources based on an interval of time between a sending of an HTTP request and a receipt of a response to said HTTP request;

sorting a list of said Internet resources based on a descending order of said one or more estimated round trip times;

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prefetching said sorted list of Internet resources until one or more predefined threshold conditions are met.

18. (Original) The method according to claim 17, wherein two or more of said Internet resources are prefetched substantially in parallel.

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19. (Previously Presented) The method according to claim 17, wherein said step of prefetching said Internet resources based on said descending order of said one or more estimated round trip times is performed only for resources associated with origin servers that have been previously accessed and said method further comprising the step of prefetching all resources

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associated with servers that have not been previously accessed.

20. (Previously Presented) The method according to claim 17, wherein said one or more estimated round trip times for each Internet resource is based on average access time statistics for the corresponding origin server and the actual size of said Internet resource when said actual size is available.

21. (Previously Presented) The method according to claim 20, wherein said one or more estimated round trip times for each Internet resource is based on average access time statistics for the corresponding origin server and the average size of Internet resources provided by said origin server if said origin server does not indicate said actual size.

22. (Previously Presented) The method according to claim 20, wherein said one or more estimated round trip times for each Internet resource is based on average access time statistics for the corresponding origin server and the average size of Internet resources provided by said origin server if the setup and wait time for accessing said origin server is not significantly less than the average round trip time for Internet resources obtained from said origin server.

23. (Original) The method according to claim 20, further comprising the step of applying a filter to said Internet resources to reduce the overhead on network, server or local resources due to prefetching.

24. (Original) The method according to claim 23, wherein said filter discards all Internet resources selected from the set comprised substantially of those Internet resources that (i) do not use the HTTP protocol for transmission; (ii) correspond to dynamically generated Web resources; (iii) correspond to resources whose size is more than a certain maximum size threshold, (iv) correspond to resources whose estimated round trip time is longer than a certain maximum time, or (v) correspond to resources whose estimated round trip time is shorter than a certain minimum time threshold.

25. (Previously Presented) A system for prefetching one or more Internet resources referenced in one or more Web pages, each of said Internet resources having an associated origin server, said tool comprising:

a memory for storing a server statistics database that records access time statistics for each origin server that has been previously accessed;

a processor operatively coupled to said memory, said processor configured to:

obtain one or more estimated round trip times for said Internet resources, wherein said one or more estimated round trip times are based on an interval of time between a sending of an HTTP request and a receipt of a response to said HTTP request; and

prefetch said Internet resources based on a descending order of said one or more estimated round trip times.

26. (Original) The system according to claim 25, wherein said server statistics database records the average setup, wait and byte transmission times and average resource size for said Internet resources obtained from said corresponding origin server.

27. (Previously Presented) A method of prefetching one or more Internet resources referenced in one or more Web pages, said method comprising the steps of:

determining if one or more of said Internet resources are candidates for prefetching based on one or more estimated round trip times, wherein said one or more estimated round trip times are based on an interval of time between a sending of an HTTP request and a receipt of a response to said HTTP request; and

prefetching said Internet resources that are determined to be candidates for prefetching according to a descending order of said one or more estimated round trip times.

28. (Previously Presented) An article of manufacture for prefetching one or more Internet resources referenced in one or more Web pages, said article of manufacture comprising:

a computer readable medium having computer readable program code means embodied thereon, said computer readable program code means comprising program code means for causing a computer to:

obtain one or more estimated round trip times for said Internet resources, wherein said one or more estimated round trip times are based on an interval of time between a sending of an HTTP request and a receipt of a response to said HTTP request; and

5 prefetch said Internet resources based on a descending order of said one or more estimated round trip times.

29. (Previously Presented) A method of prefetching one or more Internet resources referenced in one or more Web pages, said method comprising the steps of:

10 obtaining one or more estimated round trip times for said Internet resources, wherein said one or more estimated round trip times are based on an interval of time between a sending of an HTTP request and a receipt of a response to said HTTP request;

identifying a subset of said Internet resources that are candidates for prefetching based on said one or more estimated round trip times; and

15 determining whether to prefetch one or more of said Internet resources in said subset of Internet resources based on predefined conditions, at least one of said predefined conditions being based on a descending order said one or more estimated round trip times.